



UGANDA PROTECTORATE.

ANNUAL REPORT

OF THE

Medical Department

FOR THE

Year ended 31st December, 1942.

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MEDICAL DEPARTMENT

ANNUAL REPORT.

For the Year ended 31st December, 1942.

PUBLIC HEALTH.

A. GENERAL.

Staff.—Dr. W. H. Kauntze, C.M.G., M.B.E., retired from the Directorship in May, on appointment as an Assistant Medical Adviser to the Secretary of State, and was succeeded by Dr. H. S. de Boer, M.C., who arrived in July on transfer from Nyasaland.

Dr. C. F. Shelton, Deputy Director, having gone on sick leave in June, 1941, was invalided from the Service in September.

Dr. J. M. Semple, Assistant Director, acted as Director until Dr. de Boer's arrival, and Dr. J. C. Earl, Senior Medical Officer, acted first as Deputy and thereafter as Assistant Director.

2. One Senior Medical Officer and seven Medical Officers remained seconded to the East African Army Medical Corps. One Medical Officer and one Laboratory Assistant were released and returned to civil duties. Three of four nursing sisters serving with the Army, retired both from the Army and from the Colonial Nursing Service on marriage; the 4th was invalided out of the Army and is at the moment in Great Britain.

3. Dr. C. R. C. Rainsford left, on secondment, to assume duties as Senior Medical Officer, the Seychelles. One Medical Officer arrived from Great Britain on first appointment.

4. It has only been possible to maintain our medical services up to at least pre-war standards by officers undertaking increased duties and by the curtailment of leave outside the territory. Considering the strain under which everyone is working the health of the staff has remained good.

5. We have had even a greater number of casualties than usual among our nursing sisters owing to marriage, no fewer than seven leaving us for this reason. Some of these are settling in the country and we hope will be available to assume nursing duties should an emergency occur. It has only been possible to maintain our nursing services to pre-war levels with volunteers from married women in the country.

DISTINGUISHED VISITORS.

6. Dr. Kauntze visited the Protectorate in March to discuss the future medical programme and measures for yellow fever control. As he had only recently left Uganda it was not necessary for him to undertake long tours to study local conditions.

PRISONERS OF WAR, INTERNEES AND REFUGEES.

7. We have had to accommodate in the Protectorate several thousand Italian prisoners of war, something over a thousand Italian internees from Ethiopia and other internees from the Middle East, and so far five thousand Polish refugees.

8. The Prisoner of War camp is self-contained and has its own medical staff and hospitals; occupants of the camp, therefore, only required attention from officers of the Medical Department in special circumstances. The medical facilities for diagnosis and treatment provided at Kampala were made available to them. Prisoners of War however necessitate the maintenance of Army personnel as guards and the sick from these were admitted as necessary into Government institutions.

9. The camps provided for internees are also to a large extent self-contained with regard to medical staff and hospitals but the Medical Department had to provide much of the equipment required and supervise the medical work done. Skilled nursing staff had to be provided locally and at times by secondment from departmental staff.

10. Our Polish visitors have been accommodated in two large camps and although the total figure of 7,000 we expect to receive had not arrived by the end of the year the majority is already with us. The greater number of these people are women and children, the men accompanying them are largely of advanced age or physically unfit. Considering the hardships these refugees had undergone during the last two years their health was very fair but there were a number of cases of malnutrition and skin conditions including ulcers. Conjunctivitis was a common affection and a number were affected with trachoma. Their health has steadily improved since arrival in this country. The medical arrangements for the Poles were at first altogether a responsibility of the Medical Department but Polish medical staff has now become available and is assuming responsibility for the care of its own people. Hospital buildings were at first very temporary but are being slowly replaced by better buildings. Extra accommodation is being provided at the central European hospital at Kampala to deal with cases that require skilled surgical attention and trained nursing. Hospital equipment, drugs and other medical supplies have had to be provided from the Government Medical Stores, increasing the strain on available stocks.

MEDICAL SUPPLIES.

11. In order to reduce to a minimum the demands for shipping space for the transport of drugs and medical supplies from Great Britain and elsewhere and to ensure the maintenance of sufficient supplies in the country to serve all sections of the population, Government, during the latter half of the year, became the main importer. A local committee on which Government, missions and private medical practitioners were represented reduced to a minimum the list of drugs which it was considered necessary to stock locally over the war period and orders placed were limited to the approved list. Large orders for medical supplies have now been placed by Government and will be distributed under the control of Government, local trading concerns being used as distributors as considered desirable.

12. Our Pharmacist staff increased considerably the manufacture of medical preparations and continued to examine possibilities of extending such manufactures, using local products, with a view to reducing our demands for imported supplies and of shipping space. We now make cataplasma from local kaolin, starch from cassava, base ointment from bees-wax and local oils and base liniment from sim-sim oil, soap and capsicum pods. Local cotton lint is now being used almost wholly in replacement of tow and grey wool.

The Laboratory prepared over 58,000 ccs. of quinine injections and 838,000 ccs. of bismuth suspension.

RECRUITING FOR THE ARMY.

13. Recruiting for the fighting forces and pioneer battalions continued. Medical officers and African assistant medical officers undertook the medical examination of these recruits and conducted examinations as near as possible to the homes of the recruits. The standard of fitness required is high and the number of persons rejected as unfit has been large. A large acclimatisation camp was opened at Tororo. This has permitted some relaxation in the standards demanded for recruits who are now kept in the camp for a period, during which good food, graduated exercises and medical treatment improve their physique rapidly. This camp is under the medical supervision of Army officers.

MEDICAL CARE OF AFRICAN ARMY PERSONNEL.

14. At Tororo new hospital accommodation was under construction for the acclimatisation camp, but until this was completed, part of the Tororo Government civil hospital was used. At Jinja, where our main military cantonment is sited, extra accommodation had to be provided at the African Civil Hospital for the admission of military personnel requiring hospitalisation.

LEGISLATION.

15. There were some amendments to the Public Health Ordinance, the most important being a reduction in the membership of the Advisory Board of Health.

The Medical Registration Ordinance has been amended and it is now possible for the courts to order confiscation of the instruments, drugs and equipment of persons convicted of practising medicine illegally.

Under the Emergency Powers (Defence) Acts, 1939 and 1940, Regulations were made for the control of drugs and medical supplies. This gives powers for the Director of Medical Services who is made controller and certain other persons designated deputy controllers to control the sale and use of drugs in the country.

MEDICAL BUILDINGS.

16. Building has been restricted throughout the Protectorate, except to meet war needs, owing to imported building materials being in short supply. A small number of new dispensaries and aid posts have however been completed and a large ward is under erection at Masaka. Provision has been made for increasing the accommodation at Masaka and at Mulago. At the latter hospital there has been much overcrowding and the new erections will be of a semi-temporary nature. The new African hospital at Mubende was completed and occupied.

17. Government hospitals are maintained as follows :—

European.—A large central hospital at Kampala. There are also cottage hospitals at Entebbe, Jinja and Mbale. Any cases requiring skilled surgical attention or careful nursing are treated in Kampala, except in case of emergency.

Asian.—The main Asian hospital for the Protectorate is at Kampala. Small Asian hospitals are maintained at the following stations: Entebbe, Masaka, Jinja, Mbale, Soroti, Lira and Masindi. Asians are admitted in case of emergency to other district hospitals where, if necessary, patients are accommodated in separate rooms.

Africans.—The main hospital for Africans is at Mulago. This is also the seat of the medical training school.

The Central Laboratory and X-Ray Department are accommodated within easy distance of Mulago.

There are district hospitals at the following stations: Entebbe, Masaka, Mubende, Fort Portal, Mbarara, Kabale, Hoima, Masindi, Butiaba, Arua, Gulu, Kitgum, Moyo, Lira, Jinja, Soroti, Tororo, Mbale, Namasagali and Moroto. The accommodation provided vary between Jinja with its 282 beds and Mubende with 32 beds.

There are several sub-district hospitals with large ward accommodation under the direction of African Assistant Medical Officers and in addition dispensaries and aid posts. Many of the dispensaries have ward accommodation and most of those without wards have sick lines which consist of huts in which persons coming from a distance can live while attending as out-patients.

18. The number of sick seen and treated at hospitals and units under medical officers, sub-assistant surgeons and African assistant medical officers is as follows :—

New cases including examinations	...	558,332
Re-attendances	... ..	811,470
Total attendances	... ..	1,369,802

The number of sick seen and treated at all Government medical units including dispensaries and aid posts is as follows:—

New cases	...	...	...	748,221
Re-attendances	...	...	...	1,470,877
Total attendances	...	...	...	2,219,098

A number of hospitals is maintained by missionary activities, the chief of the mission hospitals being at Namirembe, the headquarters of the Church Missionary Society in Uganda, and Nsambya, the headquarters of the Mill Hill Mission.

GENERAL DISEASES.

19. *Epidemic, endemic and infectious diseases.*—The number of cases in this group recorded was 130,791 and there were 799 deaths in hospital. Malaria accounted for 61,720 cases, syphilis for 19,692 cases and yaws for 24,069 cases.

General Diseases.—35,396 cases were recorded under this heading. Rheumatism and similar affections accounted for 21,347 of this number. 470 cases are shown under the heading of cancer or other tumours of which 335 are classified as non-malignant or undetermined; there were 35 deaths in this group.

Affections of the nervous system and organs of the senses.—There were 33,541 cases. Trachoma was responsible for 3,625 cases.

Affections of the circulatory system.—There were 2,409 cases in this group. 403 patients suffered from heart diseases and of these 146 were treated in hospital with 48 deaths.

Affections of the respiratory system.—There were 56,609 cases. The pneumonias show an increase, being 2,825 with 420 deaths as compared with 2,113 with 246 deaths last year.

Diseases of the digestive system.—51,805 cases were recorded.

Diseases of the genito-urinary system.—There were 2,685 cases of non-venereal disease of the genito-urinary system.

Puerperal state and diseases of infancy.—There were 1,125 cases treated.

Affections of the skin, cellular tissue, and the organs of locomotion.—A large proportion of the 73,079 cases were of tropical ulcer.

Affections produced by external causes.—55,316 cases were reported and range from slight injuries to fatal accidents.

COMMUNICABLE DISEASES.

(a) INSECT-BORNE.

20. *Trypanosomiasis.*—Sleeping Sickness which re-appeared in the Busoga District of the Eastern Province towards the end of 1941 continued to give cause for alarm. The number of new infections reported remained high during the first quarter of the year, the peak being reached in March. The infection extended from the Busoga District to the Central District and across the Kenya border. In all 1838 cases were reported from the Eastern Province, 1,112 of which occurred before the end of March. The number of new cases during the last quarter averaged about 6 per week but there is some doubt whether all these were new infections.

Clinically the disease remained of the type caused by *T. rhodesiense* and the morphology of the trypanosome established by animal experiment was proved to be that of *T. rhodesiense*.

21. Mr. Gibbins, Laboratory Assistant, who had proved himself to be an entomologist of keen observation was released from the Army to make a survey of tsetse fly in the area affected. Before his untimely death in November he had done much work to clear up the picture. He found *G. palpalis* at a distance from the lake shore and invariably in areas where cases had occurred and reported that this species of tsetse fly travels from the lake shore to inland areas along tunnels made by trees overhanging roads and paths. He also isolated trypanosomes from the salivary glands of captured *G. palpalis* and *G. pallidipes* which on passage through animals showed the characteristics of the rhodesiense group. Early in the year *G. pallidipes* were found to be very plentiful in the area but later became less numerous. To break the

migration of *G. palpalis* from the lake shore all roads and paths were cleared of overhanging bush and trees; the work was done under the direction of Native Authorities. The measures adopted reduced the number of *G. palpalis* found away from the lake shore but as this reduction coincided with the dry season no definite conclusions of the value of the methods adopted can yet be drawn. Observations are being continued.

22. Two semi-permanent hospitals were erected, one in the Busoga district and one near the boundary of the Mbale district, to admit cases and treat them. These hospitals are proving popular for they make unnecessary the removal of patients far from their families. Desertions from hospitals have become very infrequent and Native Authorities are co-operating in getting cases deserting from hospital to return for the completion of their course of treatment.

209 deaths due to sleeping sickness were recorded in the Eastern Province.

23. *West Nile District*.—The incidence of the disease in the West Nile District continues to diminish. 246 cases were reported compared with 304 in 1941. Control measures in this district have been maintained and we continue to hope will progressively reduce the cases recorded.

24. *Other Districts*.—In Toro there were 106 cases compared with 62 in the previous year. The area affected remains small. The increase in cases recorded is considered to be due to more careful examination of the population in the infected area. A few cases have been reported from Mengo and Masaka Districts, in the Buganda Province and from Bunyoro and Acholi in the Western Province but the position gives no cause for alarm. The one case reported from Masaka is of interest since it occurred in a child far from any known focus of tsetse fly, who, so far as we could find out, had not left the vicinity of his home. A survey of the population living near the child found infected produced no other cases.

25. *Relapsing Fever*.—815 cases were reported and 36 deaths are attributed to this disease in cases treated in our hospitals. The number of cases reported in 1941 was 591 with 28 deaths. The disease is reported to be occurring in areas previously considered free.

26. *Plague*.—356 cases with 338 deaths were reported. These figures show a slight increase on the figures for last year.

27. *Typhus*.—10 cases were reported.

28. *Malaria*.—61,720 cases were reported causing 207 deaths. The number of persons suffering from this disease admitted to hospital was 7,981. Malaria remains the most important of all diseases.

29. *Blackwater Fever*.—176 cases with 27 deaths were recorded. Of these 66 with 7 deaths were treated by Government staff and 110 with 20 deaths by private medical practitioners.

30. *Yellow Fever*.—No cases were reported but the Yellow Fever Research Institute obtained the yellow fever virus from a catch of *A. simpsoni* collected in the Bwamba County in Toro District. This is the area in which the Institute is making intensive observations. This finding is all the more interesting because the human population in the area had been rendered immune during 1941 by mass inoculation. Another virus not of yellow fever was also isolated from mosquitoes in Bwamba by the Institute. The nature of this virus is not yet known but sera from the local population have been shown to protect white mice.

(b) INFECTIOUS DISEASES.

31. *Poliomyelitis*.—There were 15 cases and 5 deaths compared with 8 cases and no deaths in 1941. Cases occurred sporadically and were the cause of some concern: amongst the persons affected were a number of Europeans, mainly children.

32. *Diphtheria*.—There were 4 cases and 1 death.

33. *Cerebro-Spinal Fever*.—606 cases with 204 deaths were reported as compared with 112 cases with 38 deaths during 1941. The number of deaths

recorded is high in view of the availability of effective drugs for the treatment of this disease but this can be explained by the fact that a number of cases were reported either in a dying state or actually dead. The majority of the cases occurred in the Teso and Busoga Districts of the Eastern Province from which 179 and 189 cases were notified respectively. A large number of the cases reported from Busoga occurred in the large military camp maintained there, where in spite of preventive measures sporadic cases continued to occur with small epidemics interspersed.

34. *Dysentery*.—1,805 cases were reported; of these 760 cases were amoebic, 374 bacillary and 671 unclassified.

35. *Influenza*.—6,875 cases were reported.

36. *Small-pox*.—The country remained free of this disease. Vaccination was continued throughout the country and 292,441 persons were reported as having been done.

37. *Syphilis and Yaws*.—There were 19,692 cases of syphilis and 24,069 cases of yaws treated. The former mainly occurs amongst the Bantu people while the latter is common amongst the Nilotics who are still largely a naked people. The number of cases of syphilis reported amongst the Nilotics is increasing.

38. *Gonorrhoea*.—The number of cases treated was 8,669. Most medical officers report this disease as far more common than our figures indicate and advise that active treatment campaigns should be started. Not an inconsiderable number of persons, in Buganda especially, yearly need operative treatment for complications caused by this infection. First infections were reported to be common around military camps, but action taken by the military in co-operation with the Administration has helped to reduce this.

39. *Leprosy*.—At Government hospitals and dispensaries 434 lepers attended for treatment. The leper institutions are still maintained by missions. The Church Missionary Society have 2 institutions in the Teso District and one in Kigezi and the Roman Catholics one at Buluba in Busoga and a second at Nyenga in Mengo. Relevant statistics are given below :—

(a) *Buluba Leper Settlement, Busoga.*

Number resident	...	...	...	183
„ admitted	...	...	...	27
„ of births	...	...	...	7
„ of deaths	...	...	...	5
„ discharged	...	...	...	53

(b) *Nyenga Leper Colony, Mengo.*

Number resident	...	...	...	140
„ admitted	...	...	...	45
„ of births	...	...	...	—
„ of deaths	...	...	...	7
„ discharged	...	...	...	—

(c) *Bunyoni Leper Colony, Kigezi.*

Number resident	...	...	...	385
„ admitted	...	...	...	58
„ of births	...	...	...	13
„ of deaths	...	...	...	11
„ discharged	...	...	...	6

(d) *Teso Leper Settlements.*

(I) *Kumi Children's Home.*

Number resident	...	...	...	558
„ admitted	...	...	...	86
„ of births	...	...	...	—
„ of deaths	...	...	...	10
„ discharged	...	...	...	52

(II) *Ongino*.

Number resident	...	...	...	503
„ admitted	...	...	...	72
„ of births	...	...	...	8
„ of deaths	...	...	...	15
„ discharged	...	...	...	32

(c) HELMINTHIC DISEASES.

40. Helminthic infections are common throughout the Protectorate, no district can be considered to be free of hook-worm and round worm infections. Schistosomiasis is reported to be increasing. Tape worm is common in Ankole and the parts of the country occupied by Nilotics. Guinea worm occurs in Nilotic areas in the north and west. Onchocerciasis is being found to be far more common than we had believed in the past. It is specially common amongst the people living along the River Nile in the Busoga District.

41. The following are details of cases treated in hospitals with helminthic infections. This number does not include persons found by routine examinations to be harbouring worms, who were in hospital for other causes.

Ancylostomiasis.—2,801 cases.

Schistosomiasis.—415 cases.

Other helminthic infections.—6,175 cases.

VITAL STATISTICS.

42. The vital statistics for the Protectorate are given in tables A and B. The population has been calculated from the census figures of 1931 by the addition and subtraction of births and deaths in each subsequent year. No account has been taken of immigrants settling in the country or of immigrants temporarily resident here. The number of immigrants in the country must be steadily rising for annually large numbers of people from Ruanda Urundi, Tanganyika, the Belgian Congo and the Sudan enter in search of work and not a few of these settle permanently in the country.

43. *Birth Rate and Death Rate*.—Live births exceed deaths by 23,733 and the population increased by 6.28 per thousand. The corresponding figures for 1941 were 35,803 and 9.56 per thousand. This year deaths reported exceed the number of live births in the Mengo District of the Buganda Province, the Busoga District of the Eastern Province and the Ankole District of the Western Province. No definite reasons for this can be offered but it is possible that the departure of young men with the military forces may have been a contributive factor.

44. *Still-birth Rate*.—The number of still-births recorded was 3,888 compared with 3,834 in 1941. The accuracy of the figures reported cannot be vouched for. The still-birth rate for the Protectorate was 3.43, the highest rate being reported from Bunyoro where the rate was 6.58 and the lowest from Teso where it was 0.77. The Bunyoro rate is more likely to be accurate than that from Teso.

45. *Infant Mortality Rate*.—This was 136.91 per thousand live births. The highest rate is reported from Busoga where it was 279.07. The lowest rate recorded is from Kigezi where it is reported to be 38.97. The Busoga rate is more likely to be accurate than the one in Kigezi.

46. *Maternal Mortality Rate*.—The recorded rate was 7.69. The highest rate is recorded again from Busoga where 16.43 per thousand births and still-births was recorded. The lowest rate is from Mubende where it was 3.91. Here again the higher rate is judged to be the more accurate.

HYGIENE AND SANITATION.

47. *Labour conditions*.—Government has a Labour Advisory Committee sitting to advise on the improvement of labour conditions in the Protectorate. Special attention is being given to conditions affecting the very large number of labourers entering the territory annually from Ruanda-Urundi to work

mainly for African employers in Buganda but to some extent on the plantations maintained by sugar manufacturing companies and on other European and Asiatic plantations in Busoga and Buganda. A camp for the accommodation of these labourers on their travels is under construction near Mbarara and the provision of similar camps at other suitable points is planned. Consideration is also being given to the provision of food at these camps for it is appreciated that these labourers have difficulty in supplying themselves with food while travelling. The appointment of a Labour Commissioner to supervise all labour forces in the country and to improve their conditions of employment is under consideration. There is need for improvement in labour conditions throughout the Protectorate.

48. *Schools.*—Much progress has been made in improving school buildings and their sanitation. Government considered the need for providing food for children attending school and provision has been made to make a start with giving a mid-day meal at some schools. This constitutes a very big advance and will help in improving the physical well-being of the children. Investigations made proved that the majority of children attend school each morning fasting and that only a few of these take any food prior to their evening meal which they partake of at their homes somewhere about 7 p.m. It is not unusual, especially in periods when food is short, for Africans in rural areas to feed only once daily and that in the evenings, but a child who does not attend school is accustomed to feed over the day on fruit and other foodstuffs that he can find in gardens and in the bush. The child attending school has normally no opportunity to obtain such additions to his diet.

49. *Townships and Rural Areas.*—European health inspectors were maintained at Entebbe, Kampala, Jinja, Soroti, Masindi, Mbarara and Fort Portal, an Asiatic health inspector at Lira and African health inspectors in all other boma stations. Each year an average number of 10 Africans obtain the certificate of the Royal Sanitary Institute, being trained for the examination at the school maintained at Mulago, the course being one of three years. These inspectors are proving of great value and are doing much to improve sanitary conditions both in townships and rural areas. As the number trained increases we can expect much progress. At Soroti a piped water supply was provided. Sanitary services were satisfactorily maintained in all townships.

PORT HEALTH WORK.

50. Passenger aeroplanes are inspected at the sea plane base at Port Bell, Kampala and the Entebbe aerodrome on arrival and disinfested. Certificates of protection against yellow fever of persons landing are scrutinised and action taken under existing regulations as necessary.

During the year Laropi was put into use as a fueling station for British Overseas Airways. Passengers do not disembark here but aeroplanes are met and disinfested.

MATERNITY AND CHILD WELFARE.

51. Maternity and Child welfare services were maintained in all districts in the Protectorate. Most district hospitals have now separate maternity wards but even where these have not yet been provided accommodation for maternity cases is made available in the general female wards. All district hospitals except those at Arua and Mubende have European nursing sisters who are assisted by trained African nurses and midwives. A number of rural maternity centres were maintained under African midwives; these institutions are visited at regular intervals by European sisters. At all these institutions regular ante-natal clinics are held and are proving increasingly popular. Child welfare clinics are also held but it is found difficult to get the African mother to understand that infants should be brought regularly to clinics even when they are apparently well. The African mother, however, does bring her child now

in increasing numbers to these clinics when it is ailing. The clinics therefore serve mainly as ordinary out-patients for children but even as such serve an useful purpose.

SUMMARY.

1. The following cases received treatment in various Government institutions :—

Total number of ante-natal first attendances ...	50,084
Total number of pregnancies terminated in institutions	6,164
Total number of ante-natal re-attendances ...	138,301

2. The following cases received treatment in various Mission institutions :—

Total number of ante-natal first attendances ...	15,969
Total number of pregnancies terminated in institutions	4,577
Total number of ante-natal re-attendances ...	46,458

MEDICAL EDUCATION.

THE MEDICAL SCHOOL.

52. Work at the Medical School was continued without any curtailment of the courses of study. No changes were made in the curriculum.

The following are the results of the examinations held :—

First Examination (Chemistry, Physics, Biology, English, Mathematics). 10 candidates : 7 passed; 3 failed.

Second Examination (Anatomy and Physiology). 7 candidates : 7 passed.

Third Examination.—

PART I. (Pathology and Pharmacology). 6 candidates : 5 passed; 1 referred for a year in Pathology; 1 candidate referred from 1941 passed in Pharmacology.

PART II. (Preventive Medicine, Forensic Medicine). 6 candidates : 4 passed; 2 referred in Preventive Medicine for 3 months.

PART III. (Medicine, Surgery and Obstetrics). 4 candidates : 4 passed (2 with distinction; 1 in Midwifery and 1 in Medicine). 1 candidate referred from 1941 passed in Surgery thus completing the examinations.

TRAINING OF HEALTH INSPECTORS, MIDWIVES, NURSES AND DRESSERS.

53. Thirteen candidates sat for the certificate of the Royal Sanitary Institute : twelve passed.

Three out of four students trained in Dispensing were passed out as competent, the remaining one was referred for three months' further training.

Thirteen candidates presented themselves at the examination held by the Uganda Midwives Board, these had all been trained at the Mission Training Schools. Nine were granted certificates, the others being referred for six months.

Twelve women sat for the qualifying examination for Nurses—eight came from Mission Training Hospitals, four from Mulago. Nine candidates were granted their certificates, two were referred for three months and one failed.

Sixteen males sat for the Nursing Orderlies examination, thirteen passed and three failed.

LABORATORY.

The following is a summary of the work carried out in the Laboratory :—

1. *Parasitology.*—

Blood films examined ...	12,902
Dark ground examinations ...	23
Faeces ...	2,553

2. *Serology.*—

Kahn tests on sera ...	12,462
Kahn tests on cerebro-spinal fluid ...	426
Agglutination tests for enteric and other fevers ...	501

3. *Bacteriology.*—

Blood cultures	...	...	...	...	16
Urine cultures	...	...	...	...	92
Faeces cultures	...	...	...	...	252
Sputum for M. tuberculosis	...	...	...	...	1,032
Sputum for B. pestis	...	...	...	...	698
Swabs and Smears	...	...	...	...	859
Vaccines	...	...	...	...	5
Sterility tests on drugs	...	...	...	...	133
Water Samples	...	...	...	...	22

4. *Clinical Pathology.*—

Blood counts, etc.	...	...	...	...	1,634
Cerebro-spinal fluid	...	...	...	...	905
Pleural and other fluids	...	...	...	...	89
Urine	...	...	...	...	1,170
Miscellaneous examinations	...	...	...	...	86

5. *Biochemical examinations* ... 5026. *Autopsies and Histo-pathology.*—

Autopsies	...	...	...	...	410
Histo-pathology	...	...	...	...	585

7. *Medico-legal examinations* ... 1268. *Chemical examinations.*—

For the Medical Department	...	...	...	...	37
For the Police	...	...	...	...	113
For the Tender Board	...	...	...	...	7
For the Supply Board	...	...	...	...	2
Miscellaneous	...	...	...	...	14

FINANCIAL.

The following table compares the total expenditure for 1942 with that for 1941 :—

	1941.				1942.		
	£	s.	cts.		£	s.	cts.
Personal Emoluments	109,694	7	51	...	114,672	7	62
Other Charges	75,839	6	53	...	89,202	12	46
	185,533	14	04	...	203,875	0	08
Special Expenditure	...	...	...	...	11,392	5	50
The Revenue amounted to	20,893	6	00				

H. S. DE BOER,
Director of Medical Services.

TABLE A.—RETURN SHOWING BIRTH, DEATH, STILL-BIRTH AND INFANTILE MORTALITY RATES FOR THE UGANDA PROTECTORATE FOR THE LAST SEVEN YEARS.

PROVINCE AND DISTRICT.	BIRTH RATE PER 1,000 POPULATION.							DEATH RATE PER 1,000 POPULATION.							STILL-BIRTH RATE PER 100 BIRTHS AND STILL-BIRTHS.							INFANTILE MORTALITY RATE PER 1,000 BIRTHS.							MATERNAL MORTALITY RATE PER 1,000 BIRTHS AND STILL-BIRTHS.						
	1936	1937	1938	1939	1940	1941	1942	1936	1937	1938	1939	1940	1941	1942	1936	1937	1938	1939	1940	1941	1942	1936	1937	1938	1939	1940	1941	1942	1936	1937	1938	1939	1940	1941	1942
BUGANDA :—																																			
* Mengo ...	19'83	19'71	20'06	21'90	20'28	21'98	31'32	20'56	19'37	17'92	19'37	19'03	20'38	33'44	3'21	3'09	3'09	3'76	2'26	1'85	1'39	91'73	89'96	76'41	69'03	97'55	86'63	99'10	15'42	9'93	10'02	8'84	7'14	5'86	7'77
* Entebbe ...	20'34	20'32	21'19	21'58	20'28	21'98	31'32	16'10	14'95	13'21	12'38	19'03	20'38	33'44	1'33	1'05	0'90	1'78	2'26	1'85	1'39	74'03	60'50	59'28	59'79	97'55	86'63	99'10	6'92	6'91	6'82	4'93	4'76	5'04	6'06
Masaka ...	33'30	32'27	32'93	33'12	33'44	33'87	26'57	17'62	17'89	16'38	16'34	21'23	17'40	25'37	6'09	4'48	3'52	2'58	1'59	1'60	1'47	76'73	61'16	58'46	61'33	84'11	66'16	124'32	6'95	7'97	6'53	9'31	4'05	1'04	3'91
Mubende ...	22'02	20'17	21'54	11'96	12'10	11'24	11'29	19'39	18'85	16'83	10'17	11'03	9'51	10'06	5'09	4'30	4'97	3'47	3'14	2'52	2'98	120'87	114'41	87'72	78'84	90'48	66'82	59'22	5'78	7'86	5'03	5'11	4'05	1'04	3'91
TOTAL ...	23'17	22'60	23'32	22'53	21'71	22'75	26'76	18'77	18'02	16'38	15'59	18'09	17'82	27'56	4'07	3'34	3'12	2'95	2'12	1'82	1'53	88'76	79'36	69'45	69'03	91'86	78'16	101'73	9'60	8'43	7'52	7'84	6'03	5'23	7'09
EASTERN :—																																			
Busoga ...	23'80	22'23	21'75	20'85	21'48	21'76	19'52	26'37	26'98	21'57	16'98	20'43	21'46	27'08	8'27	7'62	6'10	6'36	5'58	5'99	5'82	276'66	248'04	211'04	177'82	254'84	215'40	279'07	16'12	18'12	18'24	15'32	13'18	12'27	16'43
† Budama ...	32'97	31'22	27'84	30'37	21'48	21'76	19'52	24'93	21'82	17'27	15'02	20'43	21'46	27'08	0'58	1'05	3'59	0'41	5'58	5'99	5'82	174'41	145'62	125'90	107'74	254'84	215'40	279'07	9'29	7'85	10'11	6'90	13'18	12'27	16'43
† Bugishu ...	38'13	34'05	31'32	38'04	29'10	27'90	24'59	26'07	20'72	16'00	15'02	20'43	21'46	27'08	5'03	5'40	5'47	0'41	5'58	5'99	5'82	217'66	200'36	144'04	122'00	161'72	137'27	130'96	11'48	11'77	9'82	7'44	6'45	5'71	6'43
† Bugwere ...	30'45	28'13	27'08	38'04	29'10	27'90	24'59	32'14	24'23	18'73	20'15	19'29	19'53	18'86	5'28	5'08	4'42	3'09	2'62	2'80	3'00	157'92	149'54	106'02	122'00	161'72	137'27	130'96	12'25	7'94	7'64	7'44	6'45	5'71	6'43
Teso ...	16'30	17'79	21'59	25'70	24'87	23'88	22'97	17'90	14'48	13'73	16'06	16'78	16'66	18'8	0'18	0'14	0'31	0'25	0'85	0'73	0'77	92'28	56'38	53'94	71'66	82'00	69'45	76'26	13'22	9'62	8'85	7'09	10'22	4'55	7'99
TOTAL ...	26'58	25'21	24'90	28'68	25'68	25'03	22'66	25'05	21'99	17'85	17'51	19'06	19'48	21'43	4'71	4'50	3'75	2'94	3'04	3'26	3'27	199'87	173'07	135'93	122'56	168'65	143'78	157'99	12'91	12'04	11'74	9'19	9'11	7'31	9'56
WESTERN :—																																			
Toro ...	21'37	20'09	23'52	26'61	30'18	26'97	27'28	20'28	17'88	17'49	15'16	18'24	18'44	18'17	4'01	3'61	3'28	3'51	3'66	4'35	4'18	202'47	139'59	111'03	112'13	137'19	118'33	95'79	12'97	13'33	11'77	12'06	12'88	9'83	9'65
Ankole ...	26'81	24'07	26'37	26'21	33'10	29'07	26'51	13'98	15'87	15'74	15'59	19'36	24'70	29'36	2'93	3'20	3'27	3'21	3'46	4'00	4'33	103'30	123'87	115'96	109'78	116'39	141'65	125'03	8'58	7'64	4'01	5'49	4'96	7'35	6'61
Kigezi ...	33'33	31'77	39'84	39'52	45'41	41'95	40'69	12'72	14'92	13'03	14'36	16'79	18'51	15'63	0'94	0'95	1'97	2'61	3'08	4'35	4'89	96'41	133'38	69'63	74'30	58'64	40'55	38'97	5'00	5'89	3'20	3'04	4'25	5'41	4'60
Lango ...	35'63	34'04	33'96	30'75	29'59	29'23	35'42	22'18	22'93	22'14	17'44	13'26	12'84	17'13	2'27	2'91	2'65	3'14	2'80	4'81	5'08	129'97	140'08	153'49	116'28	109'60	122'52	143'00	9'78	9'44	9'37	7'92	5'14	5'74	8'00
Bunyoro ...	18'96	15'84	15'33	16'50	15'46	15'49	15'57	14'32	14'43	10'10	11'20	9'92	11'16	11'77	10'43	10'00	7'66	6'77	10'75	6'64	6'58	93'42	107'20	62'14	67'89	87'34	66'67	84'65	4'95	4'45	7'82	4'38	4'93	3'09	8'67
§ Gulu ...	46'27	45'38	47'19	45'86	41'77	37'02	39'58	24'86	25'49	33'60	24'77	19'48	18'82	21'50	5'63	5'46	6'23	5'13	5'05	4'92	4'92	174'53	196'07	260'09	255'37	196'19	195'20	215'98	5'31	9'11	4'99	8'27	10'07	7'21	8'50
§ Chua ...	25'76	38'16	38'10	45'86	41'77	37'02	39'58	11'87	22'74	34'56	24'77	19'48	18'82	21'50	6'30	5'58	6'52	5'13	5'05	4'92	4'92	311'79	364'68	564'22	255'37	196'19	195'20	215'98	17'81	17'48	16'99	8'27	10'07	7'21	8'50
West Nile ...	20'66	18'69	24'68	35'96	36'50	44'00	44'34	10'27	10'90	12'67	21'51	20'63	21'01	24'38	2'31	2'82	1'61	2'65	2'90	2'85	2'39	316'23	314'10	362'28	282'36	200'83	185'61	186'61	46'11	32'01	41'54	21'83	13'89	11'57	6'43
TOTAL ...	...	...	...	32'64	34'77	33'63	34'38	...	...	...	17'46	17'43	18'71	20'62	...	...	...	3'50	3'72	4'19	4'29	...	...	...	160'50	130'23	130'12	141'60	...	...	...	9'49	8'03	7'76	7'03
UGANDA PROTECTORATE	26'42	25'38	26'70	28'89	28'65	28'23	28'78	19'60	18'95	17'50	17'02	18'12	18'75	22'54	3'97	3'79	3'46	3'21	3'23	3'47	3'43	158'64	155'67	147'18	130'84	134'42	123'99	136'91	12'28	11'17	10'64	9'08	7'98	7'15	7'69

† The population of Karamoja has been excluded from the total population and from all calculations of rates because no vital statistics are submitted from that district.

* The Entebbe District was amalgamated with the Mengo District on 1st November, 1936.

† The Bugishu, Budama and Bugwere Districts were amalgamated into the Central District on 1st January, 1937.

§ The Gulu and Chua Districts were amalgamated into the Acholi District on 1st January, 1937.

TABLE B.—VITAL STATISTICS RETURN OF THE UGANDA PROTECTORATE FOR THE YEAR 1942 (AFRICAN POPULATION ONLY).

TABLE D.—VITAL STATISTICS RETURN OF THE UGANDA PROTECTORATE.																
PROVINCE AND DISTRICT.	TOTALS FOR THE WHOLE YEAR.										ESTIMATED POPULATION.	RATES FOR THE YEAR.				
	Live Births.			Still Births.	Deaths					Birth Rate per 1000 Population.		Percentage of Still Births to Births plus Still Births.	Infantile Mortality Rate per 1000 Live Births.	Maternal Mortality per 1000 Births and Still Births.	Death Rate per 1000 Population.	
					Of Children under 1 Year.			Of Women in Child Birth.	All Other Deaths.							Total Deaths.
	M.	F.	Total.		M.	F.	Total.									
BUGANDA PROVINCE:—																
Mengo	8,650	8,485	17,135	242	870	828	1,698	135	16,462	18,295	547,176	31'32	1'39	99'10	7'77	33'44
Masaka	2,738	2,627	5,365	80	345	322	667	33	4,424	5,124	201,935	26'57	1'47	124'32	6'06	25'37
Mubende	891	899	1,790	55	56	50	106	7	1,482	1,595	158,608	11'29	2'98	59'22	3'91	10'06
TOTAL	12,279	12,011	24,290	377	1,271	1,200	2,471	175	22,368	25,014	907,719	26'76	1'53	101'73	7'09	27'56
EASTERN PROVINCE:—																
Busoga	4,152	3,355	7,507	464	1,117	978	2,095	131	8,190	10,416	384,600	19'52	5'82	279'07	16'43	27'08
Central	6,993	6,736	13,729	425	935	863	1,798	91	8,640	10,529	558,325	24'59	3'00	130'96	6'43	18'86
Teso	3,312	3,271	6,583	51	266	236	502	53	4,803	5,358	284,643	22'97	0'77	76'26	7'99	18'82
†Karamoja ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	11,757	13,362	27,819	940	2,318	2,077	4,395	275	21,633	26,303	1,227,568	22'66	3'27	157'99	9'56	21'43
WESTERN PROVINCE:—																
Tbro	2,802	2,856	5,658	247	283	259	542	57	3,171	3,770	207,442	27'28	4'18	95'79	9'65	18'17
Ankole	4,014	3,947	7,961	360	565	510	1,075	55	7,686	8,816	300,320	26'51	4'33	135'03	6'61	29'36
Kigezi	6,196	5,582	11,778	605	243	216	459	57	4,008	4,524	289,439	40'69	4'89	38'97	4'60	15'63
Lango	4,518	4,377	8,895	476	680	592	1,272	75	2,954	4,301	251,150	35'42	5'08	143'00	8'00	17'13
Bunyoro	930	901	1,831	129	83	72	155	17	1,212	1,384	117,629	15'57	6'58	84'65	8'67	11'77
Acholi	4,309	4,303	8,612	446	946	914	1,860	77	2,742	4,679	217,602	39'58	4'92	215'98	8'50	21'50
West Nile	6,367	6,237	12,604	308	1,385	1,371	2,756	83	4,085	6,924	284,267	44'34	2'39	186'61	6'43	24'38
TOTAL	29,136	28,203	57,339	2,571	4,185	3,934	8,119	421	25,858	34,398	1,667,849	34'38	4'29	141'60	7'03	20'62
UGANDA PROTECTORATE	53,172	53,576	109,448	3,888	7,774	7,211	14,985	871	69,859	85,715	3,803,136	28'78	3'43	136'91	7'69	22'54

† The population of Karamoja has been excluded from the total population and from all calculations of rates because no vital statistics are submitted from that district.

